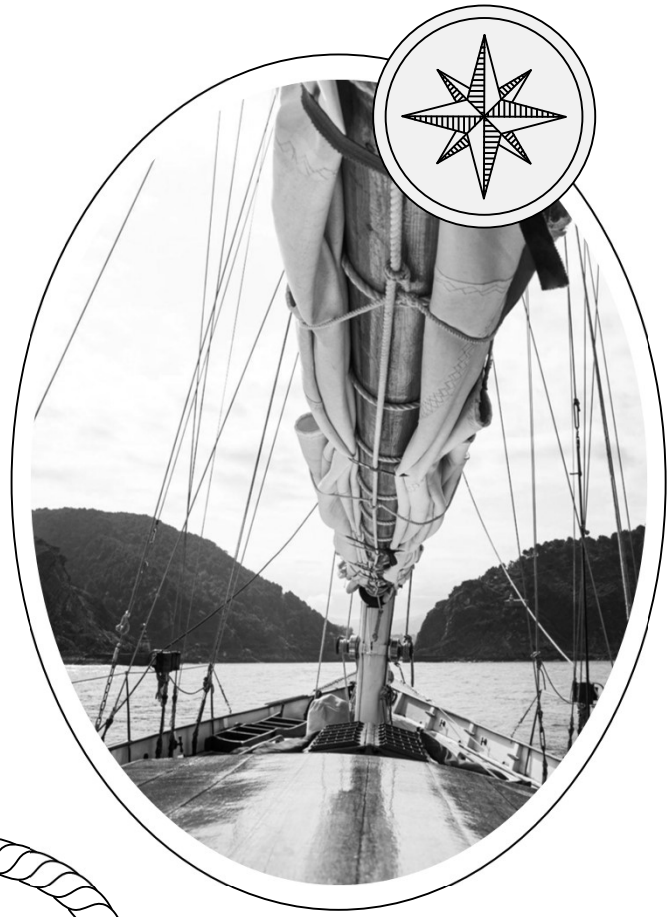
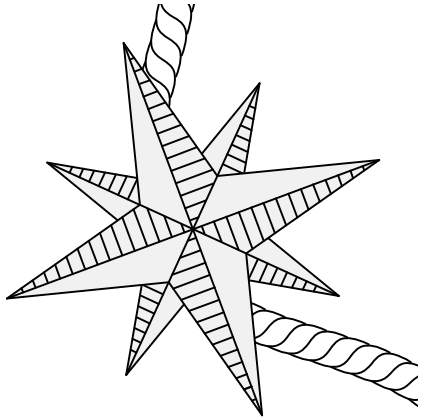
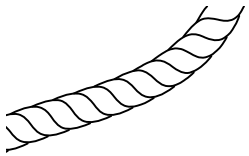




Adventures in Programming using AI

OPCUG - Tom Trottier, 2024 Feb 14 💘



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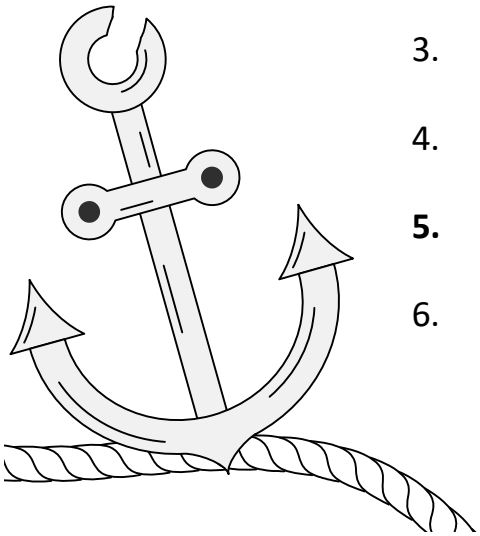
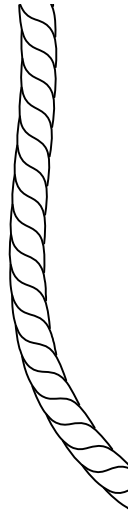
01

Programming Languages

Human-readable picky languages to tell computers what to do.





1. Javascript – for web pages
2. C, C++, C#, Rust – for fast execution
3. LISP – for list processing
4. SQL – System Query Language, for databases
5. **Python – interpretive, slow, convenient**
6. Etc., etc., etc. …

Python

Python is a high-level, general-purpose programming language. Its design philosophy emphasizes ***code readability*** with the use of significant indentation.
Python is dynamically typed and garbage-collected.

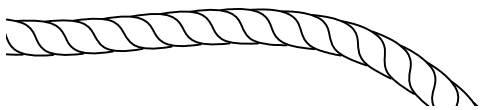
It supports many programming paradigms, including structured (particularly procedural), object-oriented and functional programming. It is often described as a "batteries included" language due to its ***comprehensive standard library***.

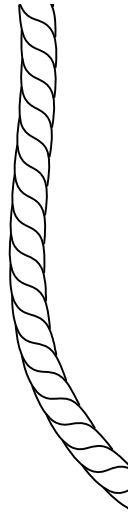
Credit: Wikipedia

02

Artificial Intelligence

1. advanced web search engines (e.g. Google Search),
2. recommendation systems (used by YouTube, Amazon, and Netflix),
3. interacting via human speech (such as Google Assistant, Siri, and Alexa),
4. self-driving cars (e.g., Waymo),
5. superhuman play and analysis in strategy games (such as chess, Go)
6. **generative and creative tools (ChatGPT and AI art),**
7. Etc., etc., etc. …





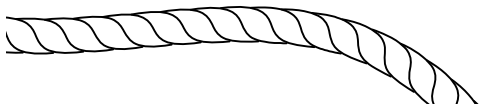
Generative AI

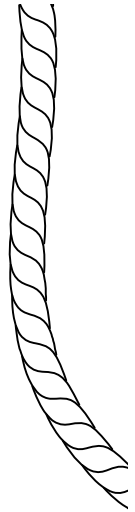
- Generative artificial intelligence (GenAI or GAI) is artificial intelligence capable of generating text, images or other data using generative models, often in response to prompts. Generative AI models learn the patterns and structure of their input training data and then generate new data that has similar characteristics -- Wikipedia

Large language model (LLM) chatbots

(trained on internet text, programs, …)

1. ChatGPT - Microsoft
2. Copilot - Microsoft
3. Bard - Google
4. LLaMA family – which can run on your PC with a GPU & lots of memory
5. Claude - Anthropic
6. Etc., etc., etc. …





03

The Problem

1. Zoom can create two text files:
   a. Captions - the spoken words
   b. Chat – what participants typed in
2. They both have timestamps embedded as the text goes on
3. Why not combine them in one file, highlight the participant names, and delete excess timestamps using a Python program?

Let’s go!

Template Credit: